

FORT HANCOCK, BATTERY GEORGE ARROWSMITH  
Gateway National Recreation Area  
Southwest edge of Sandy Point extending  
into Horseshoe Cove  
Fort Hancock  
Monmouth County  
New Jersey

HABS No. NJ-1209-K

HABS  
NJ  
13-FoHAN  
1K-

MEASURED DRAWINGS

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY  
National Park Service  
Department of the Interior  
Washington, DC 20001

# HISTORIC AMERICAN BUILDINGS SURVEY

## FORT HANCOCK, BATTERY GEORGE ARROWSMITH

HABS No. NJ-1209-K

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Location: Southwest edge of Sandy Point extending into Horseshoe Cove, Sandy Hook Proving Grounds, Gateway National Recreation Area, Fort Hancock, Monmouth County, New Jersey

USGS Sandy Hook, NJ-NY Quadrangle  
UTM: 18 584449 4477610

Date of Construction: 1906; armed in 1909.

Designer: United States Army Corps of Engineers

Significance: The strategic location of Sandy Hook at the lower New York Harbor entrance made it an important navigational landmark and a key defense site. Since pre-American Revolutionary times, a series of forts have occupied the Sandy Hook peninsula – each representing current technological advances. The present Sandy Hook gun batteries, Arrowsmith included, were built during the Endicott period (1885-1905 named after President Cleveland's first Secretary of War who headed the special Board analyzing the defenses of the United State's coasts) in response to fears that American defenses (allowed to deteriorate after the Civil War) would be vulnerable to the increasingly powerful classes of contemporary warships. Several critical advances in design and production of heavy ordinance made the Endicott defenses possible: the first large-scale use of steel for guns, the perfection of breach loading, and the introduction of far more effective propellants. The resulting weapons had improved range, accuracy and rate of fire, but were also far more expensive to produce than previous, single-piece cast, muzzle-loading weapons. Endicott's Board originally called for the construction and placement of 1,300 of these new guns and mortars of 8-inch caliber and larger. However, since the capabilities exceeded the expectations and the cost of manufacturing rose, fewer than 700 guns and mortars were actually installed. Roughly 300 guns were installed around continental harbors in batteries of two to four weapons during the period. These were all flat-trajectory weapons whose firing angles, though limited to approximately fifteen degrees of elevation, gave them sufficient range to match or surpass the guns of battleships of the day. Today many of the battery structures from the period can still be seen, but their armament has long since been removed.

Description: Battery Arrowsmith was a massive concrete structure designed for three, 8-inch gun emplacements. The structure extended 352' along its north-south axis, with a width varying from 44' to 90'. By 1995 its north extreme was buried beneath drifting sand. The western face, overlooking Sandy Hook Bay, was a 9'-9" vertical concrete wall punctuated by three, evenly spaced, 51' wide casements for the 8-inch guns. By 1995, the south elevation had been undermined by erosion and was collapsing. Sand abutments placed against the vertical concrete wall of the east elevation concealed structural details. The control and support rooms for the battery were roofed with a concrete glacis. At each gun emplacement the glacis gave way to the terreplein, a concrete deck 6' below the level of the glacis. Each terreplein, roughly a 51' by 32' trapezoid, had a semi-circular depression for the gun mount and various hatches and drains in its surface. The

walls framing each terreplein were concrete with breaks for door openings, hatches, recessed stairways, lamp housings, and sets of iron rings. Doors were 5/16" steel plate with rivetted strap hinges and swing latches, and have flat-stock metal gates. Other exterior metal features included handrails, hatches, and drainage gates.

History:

Construction of Battery Arrowsmith (George Arrowsmith was a Union officer killed at Gettysburg on July 1, 1863) began in 1906 as a result of a study the previous year that outlined tactical deficiencies in the Sandy Hook coastal defenses. In 1909 the battery was ready for arming, and was transferred from the Corps of Engineers to the Coast Artillery. The battery's location was important to the defense of the southern approaches to New York harbor. It was the only gun battery in the area below Horseshoe Cove and the southern part of False Hook Channel. The battery acted as a secondary line of defense should any warships get past the primary 12-inch gun batteries on the point of Sandy Hook. Arrowsmith was armed with three 8-inch guns, which were eventually made obsolete by newer 12-inch guns. It was disarmed in the late 1920s, but the magazine storage remained in use through the end of World War II. The sand base of the battery eventually eroded and much of the southern extent collapsed. In 1995, for safety reasons, the Army Corps of Engineers demolished the battery walls to the level of the main floor.

Sources:

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